

Applicant: Bhalakia et al.
Serial No.: 09/848,594

PATENT
Atty Docket No.: 10-9393

AMENDMENTS TO THE CLAIMS

Please amend Claims 50-58 and 80-83 as set forth below.

Please add new Claims 88-104 as set forth below.

LISTING OF CLAIMS

1-49. (Cancelled)

50. (Currently Amended) A functional laminate disposed on [for] an injection molded eye lens formed in a mold comprising:

a first resinous layer;

a second resinous layer;

a polymeric functional layer disposed between said first and second resinous layer;

said first resinous layer having an outer side serving as a front surface of said injection molded eye lens;

said second resinous layer being integral with a molded layer of said injection molded eye lens such that any thickness variation in said laminate is compensated by said molded layer;

an adhesive adhering said polymeric functional layer to both said first and second resinous layer; and

said adhesive formulated to have sufficient flexibility so as to substantially prevent crazing during injection molding of said lens;

said functional laminate having a center thickness in the range of about .2mm to about 2mm on said injection molded lens; [and,]

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said functional laminate having a generally rounded shape and having cut edges such that said functional laminate has [a] an outer dimension that snugly conforms [to a mold cavity corresponding to a] to an outer dimension of said [front surface of said] injection molded eye lens according to the formation of said outer dimension of said injection molded eye lens in said mold; and,

said outer side of said first resinous layer being substantially free of optical and cosmetic defects as a result of said cut edges snugly conforming to said outer dimension of said injection molded eye lens during injection molding thereof.

51. (Currently Amended) A functional laminate according to claim 50, said adhesive formulated to also substantially prevent yellowing of said adhesive upon exposure of said lens to sunlight.

52. (Currently Amended) A functional laminate according to claim 50, said adhesive formulated to also minimize shrinkage during curing of said molded lens.

53. (Currently Amended) A functional laminate according to claim 50, wherein said adhesive is selected from the group consisting of acrylic-type, epoxy-type and urethane-type adhesives.

54. (Currently Amended) A functional laminate according to claim 53, wherein said adhesive is a urethane adhesive.

55. (Currently Amended) A functional laminate according to claim 50, wherein said injection molded eye lens has a prescription power.

56. (Currently Amended) A functional laminate according to claim 50, wherein said injection molded eye lens has no prescription power.

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57. (Currently Amended) A functional laminate according to claim 50, wherein said polymeric functional layer is a polarizing layer.

58. (Currently Amended) A functional laminate according to claim 50, wherein said polymeric functional layer is a photochromic layer.

59-79. (Canceled)

80. (Currently Amended) A functional laminate as set forth in claim 50, wherein said outer dimension of said functional laminate also [has a dimension that] snugly conforms to a [mold] cavity of said mold so as to form a [having] a mechanical seal in said cavity during said injection molding of said injection molded eye lens.

81. (Currently Amended) A functional laminate as set forth in claim 50, wherein said outer dimension of said functional laminate also [has a dimension that] snugly conforms to a [mold] cavity of said mold so as to allow the formation of [having] a pneumatic seal in said cavity during said injection molding of said injection molded eye lens..

82. (Currently Amended) A functional laminate as set forth in claim 50, wherein said outer dimension of said functional laminate also [has a dimension that] snugly conforms to a [mold] cavity of said mold so as to allow the formation of [having] a combined mechanical and pneumatic seal in said cavity during said injection molding of said injection molded eye lens.

83. (Currently Amended) A functional laminate as set forth in claim 50, wherein said functional laminate has a completely rounded shape.

84. (New) A functional laminate as set forth in claim 50, wherein said injection molded eye lens is a progressive lens.

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85. (New) A functional laminate as set forth in claim 50, wherein said injection molded eye lens is a multifocal lens.

86. (New) A functional laminate as set forth in claim 50, wherein said injection molded eye lens is a bifocal lens.

87. (New) A functional laminate as set forth in claim 55, wherein said injection molded eye lens has a progressive prescription power.

88. (New) A functional laminate disposed on an injection molded eye lens formed in a mold comprising:

a first resinous layer;

a second resinous layer;

a polymeric functional layer disposed between said first and second resinous layer;

said first resinous layer having an exposed side serving as a front surface of said injection molded eye lens;

said second resinous layer being integral with a molded layer of said injection molded eye lens such that any thickness variation in said laminate is compensated by said molded layer;

an adhesive substance joining said polymeric functional layer to both said first and second resinous layer;

said functional laminate having a generally rounded shape and having cut edges such that said functional laminate has an outer dimension that substantially conforms to an outer dimension of said injection molded eye lens, said outer dimension of said injection molded eye lens being determined by a cavity size of said mold; and,

said exposed side of said first resinous layer being substantially free of optical and cosmetic defects as a result of said cut edges substantially conforming to said outer dimension of said injection molded eye lens during injection molding thereof.

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89. (New) A functional laminate according to claim 88, said adhesive substance formulated to substantially prevent yellowing of said adhesive substance upon exposure of said lens to sunlight.

90. (New) A functional laminate according to claim 88, said adhesive substance formulated to minimize shrinkage during curing of said molded lens.

91. (New) A functional laminate according to claim 88, wherein said adhesive substance is selected from the group consisting of acrylic-type, epoxy-type and urethane-type adhesives.

92. (New) A functional laminate according to claim 91, wherein said adhesive substance is a urethane adhesive.

93. (New) A functional laminate according to claim 88, wherein said injection molded eye lens has a prescription power.

94. (New) A functional laminate according to claim 88, wherein said injection molded eye lens has no prescription power.

95. (New) A functional laminate according to claim 88, wherein said polymeric functional layer is a polarizing layer.

96. (New) A functional laminate according to claim 88, wherein said polymeric functional layer is a photochromic layer.

97. (New) A functional laminate as set forth in claim 88, wherein said functional laminate has a completely rounded shape.

98. (New) A functional laminate as set forth in claim 88, wherein said injection molded eye lens is a progressive lens.

99. (New) A functional laminate as set forth in claim 88, wherein said injection molded eye lens is a multifocal lens.

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100. (New) A functional laminate as set forth in claim 88, wherein said injection molded eye lens is a bifocal lens.

101. (New) A functional laminate as set forth in claim 93, wherein said injection molded eye lens has a progressive prescription power.

102. (New) A functional laminate as set forth in claim 88, wherein said outer dimension of said functional laminate also substantially conforms to said cavity size of said mold in a manner so as to allow the formation of a mechanical seal with said cavity during said injection molding of said injection molded eye lens.

103. (New) A functional laminate as set forth in claim 88, wherein said outer dimension of said functional laminate also substantially conforms to said cavity size of said mold in a manner so as to allow the formation of a pneumatic seal with said cavity during said injection molding of said injection molded eye lens.

104. (New) A functional laminate as set forth in claim 88, wherein said outer dimension of said functional laminate also substantially conforms to said cavity size of said mold in a manner so as to allow the formation of a combined mechanical and pneumatic seal with said cavity during said injection molding of said injection molded eye lens.